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10/670,087	09/24/2003	Dave Rotheroe	200300847-1	6327

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EXAMINER	
SUN, XIUQIN	
ART UNIT	**PAPER NUMBER**
2863	

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/670,087	ROTHEROE, DAVE	
	Examiner	Art Unit	
	Xiuqin Sun	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3-7, 9-11, 13, 16, 17, 20, 22-27, 29-33, 35, 37, 38 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Pub. No. 20030225876) in view of Wolton et al. (U.S. Pub. No. 20040030741).

In regard to independent claims 1, 10, 20 and 35:

Oliver et al. teach a method and apparatus of monitoring measured parameters associated with each piece of equipment in an array of electronic equipment, comprising: retrieving data representing the measured parameters (Fig. 8; sections 0027 and 0054); mapping the measured parameters to color codes (Fig. 8; sections 0026 and 0038); displaying a graphic representation of the array of electronic equipment (Fig. 8; sections 0009, 0028, 0029); and in the graphic representation, representing each piece of electronic equipment in the array with the color mapped to a measured parameter associated with the piece of electronic equipment (Fig. 8; sections 0009, 0028, 0029, 0054 and 0055). Oliver et al. further teach a computer readable storage medium storing instructions that, when executed on a programmed processor,

carry out the method recited above (Figs. 2 and 5; sections 0030-0034 and 0042). The teaching of Oliver further includes: rendering a graphic representation of the array of electronic equipment for display on a display (sections 0009, 0028, 0029, 0054 and 0055).

Oliver et al. do not mention explicitly: retrieving data representing the measured parameters from a database.

Wolton et al. teach a method and apparatus for search, visual navigation, analysis and retrieval of information from networks, including the step and means of retrieving data representing the measured parameters from a database for data visual analysis (sections 0060, 0161, 0233, 0329 and 0331).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wolton et al. in the invention of Oliver et al. in order to automatically engage certain search and data archive activities on behalf of the user (Wolton et al., section 0161).

In regard to claims 3-7, 9, 13, 16, 22-26, 29-33 and 37:

The teaching of Oliver et al. further includes: receiving an input from a user interface that indicates a change in view has been selected by an operator (sections 0028 and 0029); re-displaying the graphic representation of the array of electronic equipment to change to the view selected by the operator (Fig. 8; sections 0009, 0028, 0029, 0054 and 0055); and in the graphic representation, representing each piece of electronic equipment in the array with the color mapped to the measured parameter

(Fig. 8; sections 0009, 0028, 0029, 0054 and 0055); and said method is carried out in a programmed processor (Figs. 2 and 5).

Oliver et al. do not mention explicitly: said view selected by the operator comprises one of a panned view, a rotated view, a tilted view, a moved view and a zoomed view of the graphic representation; said graphic representation comprises a three-dimensional graphic representation, and wherein the view selected by the operator comprises one of a panned view, a rotated view, a tilted view, a moved view and a zoomed view of the graphic representation; said graphic representation comprises a three-dimensional graphic representation; said graphic representation comprises a two-dimensional graphic representation.

The teaching of Wolton et al. includes: the view selected by the operator comprises one of a panned view, a rotated view, a tilted view, a moved view and a zoomed view of the graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589); the graphic representation comprises a three-dimensional graphic representation, and wherein the view selected by the operator comprises one of a panned view, a rotated view, a tilted view, a moved view and a zoomed view of the graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589); the graphic representation comprises a three-dimensional graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589); the graphic representation comprises a two-dimensional graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wolton et al. in the invention of Oliver et al. in order to provide a comprehensive and user-friendly data visualization method and system for analyzing data information collected from networks of electronic equipments (Wolton et al., Abstract and sections 0057-0059).

In regard to independent claims 11 and 17:

Oliver et al. teach a method of displaying measured parameters associated with each piece of equipment in an array of electronic equipment, comprising: retrieving data representing the measured parameters (Fig. 8; sections 0027 and 0054); mapping the measured parameters to color codes (Fig. 8; sections 0026 and 0038); displaying a graphic representation of the array of electronic equipment (Fig. 8; sections 0009, 0028, 0029); and in the graphic representation, representing each piece of electronic equipment in the array with the color mapped to a measured parameter associated with the piece of electronic equipment (Fig. 8; sections 0009, 0028, 0029, 0054 and 0055). Oliver et al. further teach a computer readable storage medium storing instructions that, when executed on a programmed processor, carry out the method recited above (Figs. 2 and 5; sections 0030-0034 and 0042).

Oliver et al. do not mention explicitly: retrieving data representing the measured parameters from a database; displaying a three-dimensional graphic representation of the array of electronic equipment.

Wolton et al. teach a method and apparatus for search, visual navigation, analysis and retrieval of information from networks, including the step and means of

retrieving data representing the measured parameters from a database for data visual analysis (sections 0060, 0161, 0233, 0329 and 0331). The teaching of Wolton et al. includes: the graphic representation comprises a three-dimensional graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wolton et al. in the invention of Oliver et al. in order to provide a comprehensive and user-friendly data visualization method and system for automatically engaging certain search and data retrieval activities on behalf of the user and analyzing data collected from networks of electronic equipments (Wolton et al., Abstract; sections 0057-0059 and 0161).

In regard to independent claim 27:

Oliver et al. further teach a system that displays measured parameters associated with a plurality of pieces of equipment in an array of electronic equipment (see Abstract), comprising: a communication circuit that receives data representing the measured parameters from the plurality of pieces of equipment (Fig. 2); a computer programmed to carry out the functions of (Figs. 5 and 8): receiving the data that relates the measured parameters to the plurality of pieces of equipment (sections 0027 and 0054); mapping the measured parameters to color codes (sections 0026 and 0038); rendering a graphic representation of the array of electronic equipment (sections 0009, 0028, 0029, 0054 and 0055); and wherein, in the graphic representation, each piece of electronic equipment in the array is represented with the color mapped to a measured

parameter associated with the piece of electronic equipment (sections 0009, 0028, 0029, 0054 and 0055).

Oliver et al. do not mention explicitly: storing the measured data in a database.

Wolton et al. teach a method and apparatus for search, visual navigation, analysis and retrieval of information from networks, including the steps and means of storing the data representing the measured parameters in a database, and retrieving data from a database for data displaying (sections 0060, 0161, 0233, 0329 and 0331).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wolton et al. in the invention of Oliver et al. in order to automatically engage certain search and data archive activities on behalf of the user (Wolton et al., section 0161).

In regard to claims 38 and 43-44:

Oliver et al. teach a method of monitoring a predetermined parameter in each of a plurality of electrical devices located in a locality (see Abstract), comprising: generating a user graphical display of graphical representations of the devices as positioned in the locality (Fig. 8; sections 0009, 0028, 0029, 0054 and 0055); and coloring each of the graphical representations of the devices with a predetermined color corresponding to a currently measured value of the predetermined parameter for the corresponding device (Fig. 8; sections 0009, 0028, 0029, 0054 and 0055).

Oliver et al. do not mention explicitly: said user graphical display is navigable; the view selected by the operator comprises one of a panned view, a rotated view, a tilted view, a moved view and a zoomed view of the graphic representation; the graphic

representation comprises a three-dimensional graphic representation; the graphic representation comprises a two-dimensional graphic representation.

Wolton et al. teach a user navigable graphical display of graphical representations of a system for monitoring an array of electronic devices (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589); the view selected by the operator comprises one of a panned view, a rotated view, a tilted view, a moved view and a zoomed view of the graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589); the graphic representation comprises a three-dimensional graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589); the graphic representation comprises a two-dimensional graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wolton et al. in the invention of Oliver et al. in order to provide a comprehensive and user-friendly data visualization method and system for analyzing data information collected from networks of electronic equipments (Wolton et al., Abstract and sections 0057-0059).

3. Claims 2, 12, 15, 21, 28, 36 and 39 -42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Pub. No. 20030225876) in view of Wolton et al. (U.S. Pub. No. 20040030741), as applied to claims 1, 11, 20, 27, 35 and 38 above, and further in view of Shimada et al. (U.S. Pat. No. 6757580).

Oliver et al. and Wolton et al. teach the method including the subject matter discussed above. The teaching of Oliver et al. further include: receiving an input from a

user interface that indicates a change in view has been selected by an operator (sections 0028 and 0029), and re-generating the graphic display to change to the view selected by the operator (sections 0009, 0028, 0029, 0054 and 0055). The teaching of Wolton et al. further include: a graphic representation comprises a three-dimensional graphic representation, and wherein the view selected by the operator comprises one of a panned view, a rotated view, a tilted view, a moved view and a zoomed view of the graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589).

The combination of Oliver and Wolton does not mention explicitly: receiving updated parameters from the electronic equipment and storing the updated parameters in the database on a periodic basis; determining that a database update has occurred; and retrieving updated measured parameters from the database for re-displaying.

Shimada et al. teach an electronic device monitoring system, including: receiving updated parameters from the electronic equipment and storing the updated parameters in the database on a periodic basis (col. 7, lines 36-39; col. 7, lines 62-67; col. 8, lines 1-16 and col. 10, lines 3-19); determining that a database update has occurred (col. 14, lines 3-13 and lines 18-24); and retrieving updated measured parameters from the database for graphical display (col. 19, lines 66-67 and col. 20, lines 1-21).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Shimada et al. in the combination of Oliver and Wolton in order to provide a mechanism through which the newest data information collected from the monitoring system can be displayed and analyzed

(Shimada et al., col. 19, lines 66-67; col. 20, lines 1-21 and col. 14, lines 3-13 and lines 18-24).

4. Claims 8, 14, 34 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Pub. No. 20030225876) in view of Wolton et al. (U.S. Pub. No. 20040030741), as applied to claims 1, 11, 27 and 38 above, and further in view of Duffy et al. (U.S. Pub. No. 20020171985).

Oliver et al. and Wolton et al. teach the method including the subject matter discussed above. The combination of Oliver and Wolton does not mention explicitly: the measured parameter comprises one of temperature, power, current and voltage.

Duffy et al. teach a system, device and method for monitoring and managing microelectronic device (see Abstract), including: measuring parameters such as temperature, power, current and voltage (sections 0065 and 0083).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Duffy et al. in the combination of Oliver and Wolton in order to provide a method and system that is capable of monitoring power-supply induced thermal anomalies of electronic devices (Duffy et al., sections 0065 and 0083).

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Pub. No. 20030225876) in view of Wolton et al. (U.S. Pub. No. 20040030741) and Shimada et al. (U.S. Pat. No. 6757580).

Oliver et al. teach a method of displaying measured parameters associated with each piece of equipment in an array of electronic equipment, comprising: retrieving data

representing the measured parameters (Fig. 8; sections 0027 and 0054); mapping the measured parameters to color codes (Fig. 8; sections 0026 and 0038); displaying a graphic representation of the array of electronic equipment (Fig. 8; sections 0009, 0028, 0029); and in the graphic representation, representing each piece of electronic equipment in the array with the color mapped to a measured parameter associated with the piece of electronic equipment (Fig. 8; sections 0009, 0028, 0029, 0054 and 0055).

Oliver et al. do not mention explicitly: retrieving data representing the measured parameters from a database; displaying a three-dimensional graphic representation of the array of electronic equipment; determining that a database update has occurred; and retrieving updated measured parameters from the database for re-displaying.

Wolton et al. teach a method and apparatus for search, visual navigation, analysis and retrieval of information from networks, including the step and means of retrieving data representing the measured parameters from a database for data visual analysis (sections 0060, 0161, 0233, 0329 and 0331). The teaching of Wolton et al. includes: the graphic representation comprises a three-dimensional graphic representation (sections 0055, 0057-0059, 0081, 0153, 0290, 0413, 0586 and 0589).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wolton et al. in the invention of Oliver et al. in order to provide a comprehensive and user-friendly data visualization method and system for automatically engaging certain search and data retrieval activities on behalf of the user and analyzing data collected from networks of electronic equipments (Wolton et al., Abstract; sections 0057-0059 and 0161).

Shimada et al. teach an electronic device monitoring system, including: storing monitored data in a database (col. 7, lines 36-39; col. 7, lines 62-67; col. 8, lines 1-16 and col. 10, lines 3-19); determining that a database update has occurred (col. 14, lines 3-13 and lines 18-24); and retrieving updated measured parameters from the database for graphical display (col. 19, lines 66-67 and col. 20, lines 1-21).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Shimada et al. in the combination of Oliver and Wolton in order to provide a mechanism through which the newest data information collected from the monitoring system can be displayed and analyzed (Shimada et al., col. 19, lines 66-67; col. 20, lines 1-21 and col. 14, lines 3-13 and lines 18-24).

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Pub. No. 20030225876) in view of Wolton et al. (U.S. Pub. No. 20040030741) and Shimada et al. (U.S. Pat. No. 6757580), as applied to claim 18 above, and further in view of Duffy et al. (U.S. Pub. No. 20020171985).

Oliver et al., Wolton et al. and Shimada et al. teach the method including the subject matter discussed above. The combination of Oliver, Wolton and Shimada does not mention explicitly: the measured parameter comprises one of temperature, power, current and voltage.

Duffy et al. teach a system, device and method for monitoring and managing microelectronic device (see Abstract), including: measuring parameters such as temperature, power, current and voltage (sections 0065 and 0083).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Duffy et al. in the combination of Oliver, Wolton and Shimada in order to provide a method and system that is capable of monitoring power-supply induced thermal anomalies of electronic devices (Duffy et al., sections 0065 and 0083).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

8. Applicant's arguments filed 04/25/05 have been fully considered but they are not persuasive.

With respect to claims 1, 10, 11, 17, 18, 20, 27, 35 and 38, Applicants argue that "the data to which Oliver refers is virtual performance data, not measured parameter data, which does not have a one-to-one correspondence with physical hardware (i.e. electronic equipment or electrical devices)". The Examiner's position is that all the subject matters recited in these claims have been taught or suggested or disclosed by the cited prior art references listed and reasoned above (see sections 2 and 5 set forth above in this Office Action for more details). Applicants' reliance upon the specification in this regard is noted. However, the feature in the specification to which Applicant refers are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants further argue that "Another recitation of some of the claims is the selection of only the relevant data from the database ..... It is noted that none of the referenced art mention, teach, suggest or disclose this functionality". This argument is not deemed to be persuasive. As acknowledged by the Applicants (Response to Office Action, page 19, 2nd paragraph, lines 3-5), the Oliver reference does teach this functionality except for physical machine data. Moreover, it is noted that physical machine data is not clearly recited in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun
Examiner
Art Unit 2863

XS
July 6, 2005

MICHAEL NGHIEM
PRIMARY EXAMINER